Bruhat Bangalore Mahanagara Palike
Executive Engineer Project Division Yelahanka

Name of Work: Modified Estimate for Providing Sculpture/Murals at Parks, Lakes, and Junctions in Yelahanka Assembly Constituency.

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit	Rate	Amount
1	KSRB 2-2 : Earthwork excavation by manual means for foundation of buildings, water supply and sanitary lines and electrical conduits etc, either in pits or in trenches 1.5m and above in width, in soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. including breaking of clods complete								
	Footings								
	NES Circle LED Light Tower	1	5.00	5.00	4.15	103.75			
	Yelahanka Lake Light Tower	1	5.00	5.00	4.15	103.75			
	for Road Edge Concrete frm East Side	1	99.00	1.20	0.30	35.64			
	For Cable Trench	1	500.00	0.90	0.75	337.50			
					Total Qty	**580.64**			
					Scehdule-B Qty	**150.00**	**Cum**		
					Qty Upto 125%	**187.50**	**Cum**	**338.74**	**63513.75**
					Qty Above 125%	**393.14**	**Cum**	**338.74**	**133172.24**
	Approved Rate		**338.74**						
2	Providing and Filling in foundation with granite / trap broken metal 100mm. and down size & with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications.								
	Footings								
	NES Circle LED Light Tower	1	5.00	5.00	0.15	3.75			
	Yelahanka Lake Light Tower	1	5.00	5.00	0.15	3.75			
					Total Qty	**7.50**			
					Scehdule-B Qty	**11.25**	**Cum**		
					Qty Upto 125%	**7.50**	**Cum**	**2751.86**	**20638.95**
	Approved Rate		**2751.86**						
3	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of Mix M15 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per								
	Footings								
	NES Circle LED Light Tower	1	5.00	5.00	0.15	3.75			
	Yelahanka Lake Light Tower	1	5.00	5.00	0.15	3.75			
	for Road Edge Concrete frm East Side	1	99.00	1.20	0.15	17.82			
	Attur Lake	1	200.00	5.00	0.15	150.00			
	For Kerb Stone								
	Attur Lake	1	420.00	0.20	0.10	8.40			
					Total Qty	**183.72**			
					Scehdule-B Qty	**15.00**	**Cum**		
					Qty Upto 125%	**18.75**	**Cum**	**6706.56**	**125748.00**
					Qty Above 125%	**164.97**	**Cum**	**6706.56**	**1106381.20**
	Approved Rate		**6706.56**						

4	KSRB 4-1.5 : Providing and laying in position plain cement concrete of Mix M20 with OPC @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.43cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications.								
	Flooring								
	NES Circle LED Light Tower	2	1.00	4.50	0.15	1.35			
		2	1.00	4.50	0.15	1.35			
	Yelahanka Lake Light Tower	2	1.00	4.50	0.15	1.35			
		2	1.00	4.50	0.15	1.35			
	for Road Edge Concrete frm East Side	1	99.00	1.20	0.15	17.82			
	Attur Lake	1	200.00	5.00	0.15	150.00			
					Total Qty	**173.22**			
					Scehdule-B Qty	**11.25**	**Cum**		
					Qty Upto 125%	**14.06**	**Cum**	**6741.03**	**94795.73**
					Qty Above 125%	**159.16**	**Cum**	**6741.03**	**1072885.48**
	Approved Rate	**6741.03**							
5	KSRB 2.3 : Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications.								
	Total Excavation Qty					580.64			
	Deduction					-7.50			
	Qty from item-2					-183.72			
	Qty from item-3					-83.25			
	Qty from item-9 footing Qty					337.50			
	For Cable Trench	1	500.00	0.90	0.75				
					Total Qty	**643.67**			
					Scehdule-B Qty	**33.94**	**Cum**		
					Qty Upto 125%	**42.43**	**Cum**	**227.72**	**9661.02**
					Qty Above 125%	**601.25**	**Cum**	**227.72**	**136915.51**
	Approved Rate	**227.72**							
6	**Conveying the excavated earth,** debris etc., with all lead and lifts Including loading and unloading chargesetc., complete as per the direction of Engineer incharge.								
	Total Excavation Qty					580.64			
	Deduction					-7.50			
	Qty from item-2					-183.72			
	Qty from item-3					-83.25			
	Qty from item-9 footing Qty								
					Total Qty	**306.17**			
					Scehdule-B Qty	**116.06**	**Cum**		
					Qty Upto 125%	**145.08**	**Cum**	**70.38**	**10210.38**
					Qty Above 125%	**161.10**	**Cum**	**70.38**	**11337.87**
	Approved Rate	**70.38**							
7	KSRB 4-6.1 : Providing and **removing centering, shuttering,** strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications.								

	NES Circle LED Light Tower								
	Footing	1	18.00		0.50	9.00			
	Pedastal Up to Ground Level	1	12.00		3.50	42.00			
	Yelahanka Lake Light Tower								
	Footing	1	18.00		0.50	9.00			
	Pedastal Up to Ground Level	1	12.00		3.50	42.00			
					Total Qty	**102.00**			
					Scehdule-B Qty	**85.31**	**Nos**		
					Qty Upto 125%	**102.00**	**Nos**	**292.29**	**29813.58**
	Approved Rate		**292.29**						
8	KSRB 4-6.6 : Providing and removing **centering, shuttering, strutting,** propping etc., and removal of form work for columns, pillars,post and struts, circular or curved in plan including cost of all materials, labour complete as per specifications								
	NES Circle LED Light Tower								
	Pedastal Above Ground Level	1	12.00		1.00	12.00			
	Yelahanka Lake Light Tower								
	Pedastal Above Ground Level	1	12.00		1.00	12.00			
					Total Qty	**24.00**			
					Scehdule-B Qty	**67.31**	**Cum**		
					Qty Upto 125%	**24.00**	**Cum**	**1034.36**	**24824.64**
	Approved Rate		**1034.36**						
9	KSRB 4.2.1 : Providing and laying in position reinforced cement concrete of Design Mix M25 with OPC @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregtes @ 0.47cum, with super plasticisers @ 3 liters confirming to IS 9103-1999 reafirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columns pillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM curing, complete but excluding cost of reinforcement as per specifications.								
	NES Circle LED Light Tower								
	For Footing	1	4.50	4.50	0.50	10.1			
	Pedastal Up to Ground Level	1	3.00	3.00	3.50	31.50			
	Pedastal Above Ground Level	1	3.00	3.00	1.00	9.00			
	Yelahanka Lake Light Tower								
	For Footing	1	4.50	4.50	0.50	10.1			
	Pedastal Up to Ground Level	1	3.00	3.00	3.50	31.50			
	Pedastal Above Ground Level	1	7.06		2.40	16.94			
					Total Qty	**109.19**	**Cum**		
					Scehdule-B Qty	**89.81**	**Cum**		
					Qty Upto 125%	**109.19**	**Cum**	**7383.34**	**806216.43**
	Approved Rate		**7383.34**						
10	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specification								
	NES Circle LED Light Tower								
	Footing 4.50mX 4.50m								

	Main Bar 16mm dia @150mm c/c both Ways= 1.58kg/m.								
			60	5.10	1.58	483.48			
			60	5.10	1.58	483.48			
	For Coloumn								
	80 # 16mm dia bar @125mmC/c		48	9.00	1.58	682.56			
	Distrubution Bar 12mm dia @125mm c/c		36	12.00	0.89	384.48			
	Bracing Rods 10mm dia bar at 125mmc/c	6	36	3.00	0.61	395.28			
	Yelahanka Lake Light Tower								
	Footing 4.50mX 4.50m								
	Main Bar 16mm dia @150mm c/c both Ways= 1.58kg/m.								
			60	5.10	1.58	483.48			
			60	5.10	1.58	483.48			
	For Coloumn								
	80 # 16mm dia bar @125mmC/c		48	10.50	1.58	796.32			
	Distrubution Bar 12mm dia @125mm c/c		36	12.00	0.89	384.48			
	Bracing Rods 10mm dia bar at 125mmc/c	6	36	3.00	0.61	395.28			
	Consider 100kg/Cum								
						4972.32			
					Total Qty	4.97	Tn		
					Scehdule-B Qty	**8.96**	Tn		
					Qty Upto 125%	**4.97**	Tn	**99036.47**	**492441.02**
	Approved Rate	**99036.47**							
11	PROVIDING, SUPPLYING, INSTALLATION, TESTING AND COMMISSIONING OF 9 MTS LED ART TOWER LIGHTING (1 UNIT) with custom design of Design supply erection and commissioning of burgeon shaped tree. a) Fabrication of external dimension of structure is dia 4472mm at ground dia 9634mm at top height 9075mm from ground. b) The structure has total of 10 no. Of horizontal support 7 nos of 4472mm dia,1nos Of 6193 mm dia, 1nos Of 7914 mm dia, 1no Of 9634mm dia c) Horizontal anular rings are made up of 25mm od 2mm thick MS tubes rolled into arc with CNC machine for accurate and repeatable shapes. d) The structure has 18 to 20 no. Of vertical supports around the vertical rings equi spaced made up or 25mm od MS tube 2mm thick and bent into tree shapes. e) The structure is degresed and coated with zinc chromate primer at dispatched for effective corrosion protection. f) The burgeon tree structure is split into minimum of 4 sectors for ease of erection transportation and availability of material, at site the 4 sectors will be welded or mechanically fastened., g) 1800 nos LED Pixel Dot, Color: RGBW, Protection: IP65, Power consumption: 1.44W, PixelHousing Transparent PC Milk white diffuser, Control: SPI,DC5/12/24V, RGBW Pixels: 4 Channels, Working temperature: -20~85, Automatic address code. h) 1 nos Master Controller DVI, work with computer online, can be compatible with pixel editing software. i) 2 nos Slave controller, DMX 512/ SPI, Power 5W, Ac input 110-240V, 50Hz, working temperature -30 D to +65D.j) 20 nos DC power driver, Power: 350W, Input: AC 110-240 V AC, 50Hz, Output: DC5/12V, Protection: rainproof. k) 200 nos PVC insulated multi core electrical unarmored flexible 3Cx2.5 Sqmm power cable having lessel ectrical losses.This PVC insulated and round sheathed wire features a bright multistrands copper conductors and it								
	NES Circle LED Light Tower	1				1			
	Yelahanka Lake Light Tower	1				1			
					Total Qty	**2.00**			
					Scehdule-B Qty	**3.00**	**Nos**		

	Approved Rate				**Qty Upto 125%**	**2.00**	**Nos**	**6136650.00**	**12273300.00**
			6136650.00						
E1	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand)								
	Light Tower NearYelahanka Lake								
		1	46.90	0.75	0.60	21.11			
		1	46.90	0.45	0.45	9.50			
					Total Qty	**30.60**	**Cum**	**6063.39**	**185553.31**
E2	Providing and laying flooring and steps fine dressed granite stone slabs 40 mm thick on cement mortar bed 1:6, 25 mm thick, and pointed with cement mortar 1:3 over existing cement concrete bed , including cost of materials, mortar, labour, curing complete as per specifications								
	Light Tower NearYelahanka Lake	1	46.90	0.60		28.14			
						28.14	**Sqm**	**2699.75**	**75970.92**
E3	Construction of Embankment by excavating the available approved Gravel/Murrum deposited at a place or borrow pits during or prior excavation with all lifts and lead, transportation to site, spreading, grading to required slope and compacting to meet the requirement complete as per specifications, including cost of labour,rolling,water,all materials,usage& all other appurtenaces required to complete the work..								
	Light Tower NearYelahanka Lake								
		1	44.16		0.75	33.12			
	Deduct light Area	-1	1.77		0.75	-1.32			
	Light Tower NearYelahanka Lake								
	East Side	1	7.25	6.35	0.75	34.53			
	West Side	1	6.45	6.35	0.65	26.62			
	Attur Lake	1	200.00	5.00	0.25	250.00			
						342.94	**Cum**	**455.43**	**156187.85**
E4	Providing and fixing of Ornamental Granite Pillar of overall height of 800mm 200x200sqmm, Octagonal to a height of 820mm and carving design at bottom as shown in drawing .and 280mm respectively as per the approved Design and drawing including quarry cutting to the required size and transporting the same from quarry to work spot\ including loading and un loading with all lead and lift etc. complete as per design and drawing. The work shall be carried out as per design and drawing. Firmly fixed to the ground by means of properly designed foundation of size 300mm x 300mm x 300mm in 1:1.5:3 ratio cement concrete The work shall be carried out as per the engineers in charge of the work etc. and completion of the work as per directions of the Engineer-in-charge of the work.								
	NES Circle Light Tower	18				18.00			
	Light Tower NearYelahanka Lake	14				14.00			
					Total Qty	**32.00**	Nos	**12500**	**400000.00**
E5	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in- charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.) including cost of materials, labour, usage charges of machinery complete as per specifications and as per directions of the Engineer-in-Charge.								
	Light Tower Gate	3	49.22			147.66			

	Light Tower NearYelahanka Lake								
	3.14(D^2-d^2)*L*7850	3	46.90			140.70			
	3.14(0.0025-0.0023)*1*7850=4.83Kg/m	1	**288.36**	4.83		**1392.78**	**Kg**	**566.46**	**788953.48**
E6	1.1kV LT, XLPE or Heat resistant PVC insulated, PVC exutruted Inner Seath armoured UG LT cable as per IS-1554 (Part1) or IS-7098 Part-1, Armouring strip thickness in average ± 5% and resistivity 14 Ohms/Kms (Max) as per IS-3975								
		1	0.51			0.51			
						0.51	**Km**	**58320.20**	**29743.30**
E7	**Sprinkler System**:Providing and Fixing Sprinkler System with in the site by Using 25mm/10kg, 40mm/6kg good quality PVC pipes, ISI marked sprinklers, Control valves and Fitting etc., Including excavation and backfilling trenches (Excluding of Providing borewell, Electrification & pump) As per the specification and direction of the Concerned officer, Rates may be quoted asper data rate Specific to the field condition.(Horticulture S.R)								
		6				6.00			
						6.00	**Each**	**4000.00**	**24000.00**
E8	Development of Lawn:Cleaning the site by Scraping and removing Top layer of Soil,Removing Unwanted Debris,Grass Along With Excavted Earth To A Distance Of 500m From The Spot Including Lead,Lift Loading And Unloading Charges[1*1*0.15m](Horticulture S.R)								
	Light Tower NearYelahanka Lake								
	Area Of Circle D=7.5 [3.14*7.5*7.5]/4]	1	44.16			44.16			
	Deduct light Area	-1	1.77			-1.77			
	Light Tower NearYelahanka Lake								
	East Side	1	7.25	6.35		46.04			
	West Side	1	6.45	6.35		40.96			
						129.39	**Sqm**	**69.04**	**8932.74**
E9	1st Digging For Lawn: Earthwork Digging Including Removing Weeds, Debris, If Any and Breaking of Clumps Watering Etc To a Depth Of (Horticulture S.R)								
	Light Tower NearYelahanka Lake								
	Area Of Circle D=7.5 [3.14*7.5*7.5]/4]	1	44.16			44.16			
	Deduct light Area	-1	1.77			-1.77			
	Light Tower NearYelahanka Lake								
	East Side	1	7.25	6.35		46.04			
	West Side	1	6.45	6.35		40.96			
						129.39	**Sqm**	**97.16**	**12571.05**
E10	2nd Digging For Lawn: Digging For Second Time And Removing Weess If Any Miner Leveling To a Depth Of 0.45m (Horticulture S.R)								
	Light Tower NearYelahanka Lake								
	Area Of Circle D=7.5 [3.14*7.5*7.5]/4]	1	44.16			44.16			
	Deduct light Area	-1	1.77			-1.77			
	Light Tower NearYelahanka Lake								
	East Side	1	7.25	6.35		46.04			
	West Side	1	6.45	6.35		40.96			
						129.39	**Sqm**	**48.58**	**6285.52**

E11	Soil Filling For Lawn Supply And Stocking Good Quality Red Earth Etc For Filling The Top Layer To a Depth of 0.15m [1*1*0.15](Horticulture S.R)								
	Light Tower NearYelahanka Lake								
	Area Of Circle D=7.5 [3.14*7.5*7.5]/4]	1	44.16			44.16			
	Deduct light Area	-1	1.77			-1.77			
	Light Tower NearYelahanka Lake								
	East Side	1	7.25	6.35		46.04			
	West Side	1	6.45	6.35		40.96			
						129.39	**Sqm**	**65.81**	**8514.83**
E12	Soil Filling For Lawn Providing Sand,FYM And Red Earth in the Ratio of 1:3:6 And Spreading To a Depth of 7.5cm At the Required Site (Horticulture S.R)								
	Light Tower NearYelahanka Lake								
	Area Of Circle D=7.5 [3.14*7.5*7.5]/4]	1	44.16			44.16			
	Deduct light Area	-1	1.77			-1.77			
	Light Tower NearYelahanka Lake								
	East Side	1	7.25	6.35		46.04			
	West Side	1	6.45	6.35		40.96			
						129.39	**Sqm**	**53.80**	**6960.91**
E13	Supply Of Lawn Grass: Laying of barbada gross over newly laid red earth surface with all lead and lift and directions of the Engineer-In-charge of the work.(Horticulture S.R)								
	Light Tower NearYelahanka Lake								
	Area Of Circle D=7.5 [3.14*7.5*7.5]/4]	1	44.16			44.16			
	Deduct light Area	-1	1.77			-1.77			
	Light Tower NearYelahanka Lake								
	East Side	1	7.25	6.35		46.04			
	West Side	1	6.45	6.35		40.96			
						129.39	**Sqm**	**15.00**	**1940.78**
E14	Crawler mounted Crane 35 t capacity (V-II, P.No.A-44, I.No.21 of PW, PWD SR 2021-22)								
	LED Light Tower								
	12days	12	6			**72**	**hr**	**4735.29**	**340940.94**
E15	Supply And Fixing Of BBMP Logo Of 40" Height And 24" Width Made Of Stainless Steel Plate With Buffed And Mirror Finish 2mm Coating it With Titanium Nitride For Gold Colour Including With All Lead And Lift And Completion Of The Work As Per Direction Of Engineer in Charge Of The Work.[approved Rate]								
		4				4	**Nos**	**100000.00**	**400000.00**
E16	Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work								
	Attur Lake	1	200.00	5.00	0.35	350.00			
						350.00	**Cum**	**73.64**	**25773.93**

E17	Providing and fixing pre cast solid cement concrete kerb stones made out of M20 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete as directed by the Engineer in Charge of the work (excluding GST and Area Leading Charges) (Approved Rate)							
	Attur Lake	1	420.00			420.00		
						933.00	**Nos**	**531.84**	**496209.52**
E18	Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces							
	Attur Lake	1	420.00		0.35	147.00		
						147.00	**Sqm**	**96.30**	**14155.84**
							Total Construction Amount	**19394550.72**
							Towards GST 12% For S.R Items At 1st Part Bill	**91128.00**
							Towards GST 18% For S.R Items At 2nd Bill	**1073171.11**
							Sub Total	**20558849.83**
							Miscellaneous	**518.27**
							Grand Total Including GST	**20559368.10**

Assistant Engineer
Project Division Yelahanka

Asst Executive Engineer
Project Division Yelahanka

Executive Engineer
Project Division Yelahanka

Asst Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore

Technical Sanction
Accorded For Rs 20559368.10
Head of A/C P2178
CER NO : 31 Dt: 29/11/23